

Fatima Institute of Management

NBA MCA MSc (IT & M)

13th September 2017

INTERNATIONAL CONFERENCE ON

GLOBAL TALENT MANAGEMENT IN THE DIGITAL ERA



Fatima College (Autonomous)

College with Potential for Excellence

Re-Accredited with 'A' grade by NAAC

(National level 27th rank - NIRF 2017)

Mary Land, Modurai

GLOBAL TALENT MANAGEMENT IN THE DIGITAL ERA

**© Faculty Members of MBA, MCA, M.Sc. IT
Fatima College**

ISBN: 978-93-86537-95-9

First Edition : 2017

All rights reserved. No part of this book may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, mechanical, photo copying, recording or otherwise, without prior written permission of the author or publisher.

Publisher

SHANLAX PUBLICATIONS

61, 66 T.P.K. Main Road,
Vasanthanagar,
MADURAI – 625003
Tamil Nadu, INDIA

Ph: 0452-4208765,

Mobile: 7639303383

email: publisher@shanlaxpublications.com

web: www.shanlaxpublications.com

104	Fingerprint-Iris Fusion with Fuzzy Logic: A Multimodal Biometric System S. Selvarani	439
105	Privacy Preserving Mapreduce for Bigdata Processing Based on Traffic Aware Partitioning M.B.C.Ashavani	444
106	Prognosticate Heart Disease using MAFIA T.Leena prema kumara	452
107	An Empirical Study on Various Types of Mobile Sensors S.Selvam & R.Ajay Janarthana	456
108	Seclusion of Image Using Watermarking Method P.Angel	463
109	Cloud Computing: Security Issues and Platforms S.P. Pradeepa & P.Renganayaki	467
110	Comparative Study on Video Calls in Rural Area J.Sudhamani & R.Biruntha	471
111	A Study on Dimensions of Customer Preference on Fast Food Restaurants in Chennai City Dr. S. Yuvaraj & H. Krupanandhan	475
112	An Analysis of Implementation and Validation Techniques in Filtering and Segmentation for Intravascular Ultrasound (IVUS) Images C.Mahadevi & Dr.S.Sivakumar	481
113	A Survey on Augmented Reality R.Vanitha	492
114	Achieving Secure Anti - Collusion for Sharing of Data Between Dynamic Groups in the Cloud M.UmaMaheswari, P. Ganesh Babu	495
115	A Systematic Study on Graph Based Approaches for Digital Image Processing K. Sankareswari	505
116	Data Security in Cloud Computing B.Angel	509
117	Analysis of Data Security in Cloud Computing Using Access Control Technique	514

PROGNOSTICATE HEART DISEASE USING MAFIA

T. Leena prema kumari

Department of B.Sc(IT), Assistant Professor, Fatima College

Abstract

Prognosticating a Heart disease at the early stage is a very challenging one. Data mining techniques are significantly used in many areas including cheminformatics, bioinformatics, business science and it can be applied on differ data such as visual, textual, real time and spatial data. To get better result the data mining techniques can be applied on the medical data which is information rich but the knowledge poor. Data mining is to trawl huge amount of data to discover or identify interpretable unknown patterns in the data. Data mining has been widely considered as an effective tool for medical knowledge discovery. Huge amount of data generated by medical transactions are complex to be processed and analyzed by traditional methods. Data mining provides technology to transform these data into useful information for decision making. Predicting the outcome of the disease is one of the challenging tasks. Association rule mining is a general purpose rule discovery scheme. It is being used for rules in medical data. In this thesis we discuss about an approach for prediction of the risk levels of heart attack from medical database. The detection of heart disease from various symptoms is a major challenging task, and so we collect experience and knowledge from specialist for effective diagnosis. Initially, the records are being cleaned and filtered so that irrelevant data would be removed from the database. Then, clustering is performed using K-Means clustering algorithm where the data relevant to heart attack is being extracted. After that, the frequent patterns are being mined from the relevant data using MAFIA (Maximal Frequent Itemset Algorithm) algorithm. Finally, we use the decision tree C4.5 algorithm to display the level of heart attack. The result produced is expected to be capable of predicting the heart attack efficiently and the test results are tabulated to perform experiential learning based on past data sets. Keywords- Data mining; Frequent Pattern; MAFIA (Maximal Frequent Itemset Algorithm); C4.5 Algorithm

Keywords— Data mining algorithms,, K-means algorithms, Clustering methods etc.

Introduction

Data mining is process of extracting useful information from large amount of databases. Data mining is most useful in an exploratory analysis because of nontrivial information in large volumes of data. Data mining is the process of extracting data for finding buried patterns which can be transformed into significant. Data mining knowledge afford a user-oriented approach to new and concealed patterns in the data. The knowledge which is exposed can be used by the healthcare practitioners to get better quality of service and to reduce the extent of adverse medicine effect. Hospitals have to reduce the charge of medical tests. They can attain these consequences by employing suitable decision support systems. Health care data is enormous. It consists of patient centric data, resource organization data and altered data. Medical care organizations must have capability to explore data. Treatment records of millions of patients can be hoarded and data mining techniques will aid in answering numerous essential and decisive questions interrelated to health care. Data mining techniques has been performed in healthcare domain. This realization is in the arouse of explosion of difficult medical data. Medicinal data mining can utilize the veiled patterns present in huge medical data which otherwise is left undiscovered. Data mining techniques which are useful to medical data include association rule mining for finding frequent patterns, prediction, classification and clustering. Data mining techniques are more useful in predicting heart diseases, lung cancer, and diabetes. This paper analyzes the heart disease predictions using classification algorithms. These hidden patterns can be used for health diagnosis in medicinal data. Data mining technology afford an effective approach to latest and indefinite patterns in the data. The information which is identified can